DEPARTMENT OF RADIO

MESSRS. DELAND, GAINER, HJIRMSTAD, RICHARD

RADIO 1. RADIO RECEPTION. Fundamentals of receiving circuits; types of receiving antennae and methods of installation; national board of fire underwriters code regulations; simple receiving circuits; elementary detectors and their use in the receiver; the electron tube; characteristics and uses of the vacuum tube; amplification; functions of amplifiers; frequency ranges and methods of coupling; methods of correcting frequency characteristics of audio amplifiers; theory of regeneration and regenerative circuits; radio-frequency, amplification and methods of regeneration control; use of special vacuum tubes for radio-frequency amplification; the thermionic rectifier and its application as a detector in radio receivers; development and use of the linear detector; modern radio receivers; the tuned radio frequency receiver; the Neutrodyne; the Superhetrodyne; reproducers and loudspeakers; the telephone receiver; the development of the magnetic cone; the dynamic cone; the electro-static reproducer and other special speaker developments; selection and best use of the loudspeaker; power supply systems; the thermionic rectifier as used in plate supply units; the A-C receiver; methods of obtaining power supply; methods of obtaining biasing voltages; services; service problems in A-C receivers; principles of public address systems; theory and developments in television.

MR. DELAND.

RADIO 6. RADIO RECEPTION. Circuit tracing; measurement of vacuum tube characteristics; amplification constant; plate resistance; mutual conductance; receiver design and construction; detector circuit; construction of audio frequency amplifiers; radio frequency oscillator for service tests; construction of a five tube tuned radio frequency receiver; service tests of radio receivers; calibration of receivers; neutralizing processes; test methods for radio-frequency amplifiers; testing audio frequency amplifiers; routine tests and service methods. Radio 6 is a laboratory course supplementing Radio 1.

MR. DELAND AND STAFF.